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EXAMINER	
ZAIDI, IQBAL	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/591,218	YAN, WEIZHONG	
	Examiner	Art Unit	
	IQBAL ZAIDI	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The instant application having application No 10/591218 filed on 11/21/2007 is presented for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R 1.63.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 08/31/2006 and 05/29/2007. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claim 1-6, and 11-16** are rejected under 35 U.S.C 103(a) as being unpatentable over Fujii et al (US 20040103210, May 27, 2004) in view of Gai et al.(US 6535491, Mar. 18, 2003)

Regarding **claim 1** Fujii discloses A method for switching route*(page 3, (0045), (Multi-protocol Label Switching) network)*, comprising the steps of: setting a correspondence relationship between a port number of each destination port and a port number of a transmitting port of a network device, wherein, the port number of each transmitting port is the corresponding port number of the destination port*(page 3, (0046), the node N7, an SNC 1(port number) for connecting an input terminal (source port) for user signals and an output terminal (destination port) to the link L11 is formed and, in the node N8, an SNC 2 (destination port number) for connecting an input terminal from the link L11 and an output terminal to the link12 is formed)*; wherein the transmitting port and backup port are both corresponding to a fault destination port, when there is a service failure in any destination port of the network device; and transmitting the data packet based on the saved correspondence relationship, by the network device, after receiving a data packet*(page 2, (0018), a network management apparatus for managing a transmission network in which, when a failure(s) has have occurred to a currently-used route(s) set for transmitting signals, each node present on a predetermined alternative route form an alternative route(s) by setting backup connections for the alternative route(s) and the signals are transmitted along the*

alternative route, comprising a storage unit for storing management data for managing the setting statuses of the backup connections of each node present on the alternative route(s); and a determination unit for setting the setting status corresponding to the alternative connections in the management data, to setting completed on receiving from a node present on the alternative route a creation notice of the backup connections of the node and for determining that the recovery of the currently-used route(s) has been completed when all the setting statuses of the alternative connections having the alternative route(s) are set to setting completed).

Fujii discloses all aspects of the claimed invention, *except modifying the number of the transmitting port into the number of a backup port in the set correspondence relationship and saving the modified relationship.*

Gai is the same field of invention teaches modifying the number of the transmitting port into the number of a backup port in the set correspondence relationship and saving the modified relationship*(Gai, See Fig 3D, column 12, FIG. 3D is a flow diagram of a rapid reconfiguration process 340 following a link failure according to the present invention. In response to the detection of a failure at port number three (the root port), indicated at block 342, rapid reconfiguration entity 234 at switch 214 selects a backup port to become the new root port, as shown at box 344. Rapid reconfiguration entity 234 use the spanning tree algorithm to select the next root port and save the changes).*

Fujii and Gai are analogous art because they are from the same field of endeavor of access to a service device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Fujii to include the teaching of Gai because it is providing a system for rapid reconfiguration when a new link (or switch), representing a better path the root for a given switch, is added or recovered.

Regarding **claim 2** Fujii discloses after receiving the data packet, the network device finding out the port number of the destination port corresponding to an identifier value of the received data packet by searching an original routing table in the network device itself according to the identifier value of the received data packet*(See Fig 5, shows the original path table in the network device)*; the network device searching out the port number of the transmitting port corresponding to the found port number of the destination port according to the saved relationship*(page 3, (0044-0045), In FIG. 2, a backup route B1 is indicated by the dotted line, that passes the nodes N71N4/NS/N6/N9 and is used instead of the currently-used path P1 when a failure has occurred to the link L11 included in the currently-used path PI. In each node, connections for setting a path are formed and each node holds(saved) this connection information, this connection information is sub-network connection (hereinafter, referred to as "SNC") information or cross connection information for a transmission network and is routing information for an MPLS (Multi-protocol Label Switching) network)*; and the network device transmitting the data packet via the destination port which is corresponding to the searched out port number of the transmitting port*(page 3, see FIG. 2, shows the net work device*

transmitting the data packet via destination port SNC8 corresponding to the searched out port number).

Fujii discloses all aspects of the claimed invention, *except* the step of the network device transmitting the data packet based on the saved relationship comprises.

Gai is the same field of invention teaches the step of the network device transmitting the data packet based on the saved relationship comprises *(Gai, the switch will select a new root port based upon the next best information it has, and begin transmitting through its other ports, as links or devices are repaired or added, a switch may receive containing better information than that stored for a particular port)*.

Regarding **claim 3** Fujii discloses The method according to Claim 1, wherein the step of setting the relationship comprises: setting successively the relationship of the network device according to the sequence of the port numbers of the destination port*(page 3, (0044), a path (route) for transmitting user signals is set on the transmission network 2, In FIG. 2, a path P1 passing the nodes N7/N8IN9 is set, Paths are classified into currently-used paths (currently-used routes) to be set)*; and the step of the modifying comprising: the network device finding the port number of the transmitting port which is corresponding to the port number of the fault destination port according to the port number of the fault destination port; and modifying the port number of the transmitting port into the backup port number which is corresponding to the fault destination port*(page 3, (0044),when failures have occurred to the currently-used paths. In FIG. 2, a backup route B1 is indicated by the dotted line that passes the nodes*

N71N4/NS/N6/N9 and is used instead of the currently-used path P1 when a failure has occurred to the link L11 included in the currently-used path PI).

Regarding **claim 4** Fujii discloses The method according to Claim 1, further comprising: before the step of modifying, when every destination port in the network device runs well, the network device finding out the port number of the destination port which is corresponding to the received data packet identifier value from the original routing table in the network device itself after receiving the data packet*(page 3, (0044), a path (route) for transmitting user signals is set on the transmission network 2, In FIG. 2, a path P1 passing the nodes N7/N8IN9 is set, Paths are classified into currently-used paths table(original routing table) (currently-used routes) to be set)*; searching out the port number of the transmitting port corresponding to the found port number of the destination port in the set relationship*(page 3, (0044), when failures have occurred to the currently-used paths. In FIG. 2, a backup route B1 is indicated by the dotted line, that passes the nodes N71N4/NS/N6/N9 and is used instead of the currently-used path P1)*; and transmitting the data packet via the destination port indicated by the port number of the transmitting port searched out*(page 3, (0044), a path (route) for transmitting user signals is set on the transmission network 2, In FIG. 2, a path P1 passing the nodes N7/N8IN9 is set, Paths are classified into currently-used paths table(original routing table) (currently-used routes) to be set)*.

Regarding **claim 5** Fujii discloses The method according to any of Claim 1, wherein the destination port is in the uplink direction; and the data packet is the packet transmitted in the uplink direction *(see Fig 2, FIG. 2 shows a transmission network in which nodes (transmission apparatuses) N1-9 are connected in a meshy pattern by links (uplink) L1-12, and transmit data packet in the uplink direction).*

Regarding **claim 6** Fujii discloses The method according to any of Claim 1, wherein the destination port is in the downlink direction; and the data packet is the packet transmitted in the downlink direction*(page 3, (0047),See Fig 2, shows when a failure has occurred to a link or a node, a node connected downstream adjacent to the link to which the failure has occurred transmits to all the other nodes failure occurrence information having information indicating the link or the node to which the failure has occurred (for example, a link identifier of the link to which the failure has occurred). For example, as shown in FIG. 2, when a failure has occurred to the link L11, the node N8 transmits failure occurrence information to other nodes. Thereby, all the nodes can know which link the failure has occurred to. The failure occurrence information can also be transmitted using a control signal and can also be transmitted being inserted in the header of a user signal)*.

Regarding **claim 11,** Fujii discloses the destination port is in the uplink direction; and the data packet is the packet transmitted in the uplink direction *(see Fig 2, FIG. 2 shows a transmission network in which nodes (transmission apparatuses) N1-9 are*

connected in a meshy pattern by links (uplink) L1-12, and transmit data packet in the uplink direction).

Regarding **claim 14,** Fujii discloses the destination port is in the downlink direction; and the data packet is the packet transmitted in the downlink direction(page 3, (0047),See Fig 2, shows when a failure has occurred to a link or a node, a node connected downstream adjacent to the link to which the failure has occurred transmits to all the other nodes failure occurrence information having information indicating the link or the node to which the failure has occurred (for example, a link identifier of the link to which the failure has occurred). For example, as shown in FIG. 2, when a failure has occurred to the link L11, the node N8 transmits failure occurrence information to other nodes. Thereby, all the nodes can know which link the failure has occurred to. The failure occurrence information can also be transmitted using a control signal and can also be transmitted being inserted in the header of a user signal).

Regarding **claim 12,** Fujii discloses the destination port is in the uplink direction; and the data packet is the packet transmitted in the uplink direction *(see Fig 2, FIG. 2 shows a transmission network in which nodes (transmission apparatuses) N1-9 are connected in a meshy pattern by links (uplink) L1-12, and transmit data packet in the uplink direction)*.

Regarding **claim 15,** Fujii discloses the destination port is in the downlink direction; and the data packet is the packet transmitted in the downlink direction(page 3, (0047),See Fig 2, shows when a failure has occurred to a link or a node, a node connected downstream adjacent to the link to which the failure has occurred transmits to all the other nodes failure occurrence information having information indicating the link or the node to which the failure has occurred (for example, a link identifier of the link to which the failure has occurred). For example, as shown in FIG. 2, when a failure has occurred to the link L11, the node N8 transmits failure occurrence information to other nodes. Thereby, all the nodes can know which link the failure has occurred to. The failure occurrence information can also be transmitted using a control signal and can also be transmitted being inserted in the header of a user signal).

Regarding **claim 13,** Fujii discloses the destination port is in the uplink direction; and the data packet is the packet transmitted in the uplink direction (see Fig 2, FIG. 2 shows a transmission network in which nodes (transmission apparatuses) N1-9 are connected in a meshy pattern by links (uplink) L1-12, and transmit data packet in the uplink direction).

Regarding **claim 16,** Fujii discloses the destination port is in the downlink direction; and the data packet is the packet transmitted in the downlink direction(page 3, (0047),See Fig 2, shows when a failure has occurred to a link or a node, a node connected downstream adjacent to the link to which the failure has occurred transmits

to all the other nodes failure occurrence information having information indicating the link or the node to which the failure has occurred (for example, a link identifier of the link to which the failure has occurred). For example, as shown in FIG. 2, when a failure has occurred to the link L11, the node N8 transmits failure occurrence information to other nodes. Thereby, all the nodes can know which link the failure has occurred to. The failure occurrence information can also be transmitted using a control signal and can also be transmitted being inserted in the header of a user signal).

6. **Claim 7-10, and 17-18** are rejected under 35 U.S.C 103(a) as being unpatentable over Skirmont et al (US 7058009, Jun. 6, 2006) in view of Fujii et al (US 20040103210, May 27, 2004)

Regarding **claim 7** Skirmont discloses A network device, comprising: a CPU*(column 2, CPU monitors the ports and updates information in the fabric interface circuits for ports active or failed)*; a first routing unit*(column 3, FIG. 6 is a table showing ports and associated line items port cards in these routers that are not SONET boxes is an for the first line card(first routing unit))*; and a second routing unit*(column 3, FIG. 5 is a block diagram illustrating more detail of a router configuration and second line card (second routing unit)))*, wherein, the CPU is adapted to: monitor each destination port of a network device in real time, and when a service failure is found in any destination port of the network device*(column 2, CPU monitors the ports and updates information in the fabric interface circuits for ports active or failed)*, transmit the information of the service

failure to the first routing unit*(column 3, a failure of one or more Ports on a line card (first routing unit)serving a link)*; the first routing unit is adapted to*(column 3, FIG. 6 is a table showing ports and associated line items port cards in these routers that are not SONET boxes is an for the first line card(first routing unit))*: save the existing routing table of the network device*(column 3, See FIG. 6 FIG. 6, with a line item for at least each port on the active card. In embodiments of the invention such a table may be stored elsewhere than on a GFR, such as on a PPA, on a fabric card, or elsewhere, as long as may be made to the port-status table))*, receive the information of the service failure from the CPU*(column 2, The card is characterized in that the CPU monitors the ports and updates information in the fabric interface circuits for ports active or failed))*, find out the port number of the destination port corresponding to the received data packet based on the self-stored routing table, and transmit the found port number of the destination port to the second routing unit*(column 1-2, the steps of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port))*; the second routing unit is adapted to*(column 3, FIG. 5 is a block diagram illustrating more detail of a router configuration and second line card (second routing unit))*, when receiving the port number of the destination port sent from the first routing unit*(column 3, FIG. 6 is a table showing ports and associated line items port cards in these routers that are not SONET boxes is an for the first line card(first routing unit))*, search out the port number of the transmitting port corresponding to the received port number of the destination port in the saved relationship between the port number of each destination port and the port number of the transmitting port*(column 1-2, the steps*

of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port status as active or failed and an alternative destination for each port, checking the table by the interface circuitry for a packet received)), and transmit the data packet via the destination port indicated by the port number of the transmitting port searched out*(column 1-2, the steps of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port status as active or failed and an alternative destination for each port, checking the table by the interface circuitry for a packet received and sending the received Packet to the predestined port if the port is listed in the table as active, and sending the received packet to the alternative destination if the port is listed in the table as failed))*.

Skirmont discloses all aspects of the claimed invention, except *and <u>modify</u> a port number of a transmitting port corresponding to a fault destination port into the port number of the backup port corresponding to the fault destination port in the correspondence relationship between the port number of each destination port and the port number of the transmitting port which is saved in the second routing unit; save the relationship between the port number of each destination port and the port number of the transmitting port in the network device.*

Fujii is the same field of invention teaches and <u>modify</u> a port number of a transmitting port corresponding to a fault destination port into the port number of the backup port corresponding to the fault destination port in the correspondence relationship between the port number of each destination port and the port number of

the transmitting port which is saved in the second routing unit*(page 2, (0018), a network management apparatus for managing a transmission network in which, when a failure(s) has have occurred to a currently-used route(s) set for transmitting signals, each node present on a predetermined alternative route form an alternative route(s) by setting backup connections for the alternative route(s) and the signals are transmitted along the alternative route, comprising a storage unit for storing management data for managing the setting statuses of the backup connections of each node present on the alternative route(s); and a determination unit for setting the setting status corresponding to the alternative connections in the management data, to setting completed on receiving from a node present on the alternative route a creation notice of the backup connections of the node and for determining that the recovery of the currently-used route(s) has been completed when all the setting statuses of the alternative connections having the alternative route(s) are set to setting completed);* save the relationship between the port number of each destination port and the port number of the transmitting port in the network device*(page 3, (0046), the node N7, an SNC 1(port number) for connecting an input terminal (source port) for user signals and an output terminal (destination port) to the link L11 is formed and, in the node N8, an SNC 2 (destination port number) for connecting an input terminal from the link L11 and an output terminal to the link12 is formed).*

Skirmont and Fujii are analogous art because they are from the same field of endeavor of access to a service device.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Skirmont to include the teaching of Fujii because it is providing lower-order NMSs for managing and maintaining the areas respectively and a higher-order NMS for controlling over these lower-order NMSs.

Regarding **claim 8,** Skirmont discloses all aspects of the claimed invention, except *the first routing unit is further adapted to find out the corresponding port number of the destination port corresponding to the currently received data packet according to the self-stored routing table in the prior art and transmit the currently received data packet via the destination port indicated by the found port number of the destination port when every destination port in the network device runs well.*

Fujii is the same field of invention teaches the first routing unit is further adapted to find out the corresponding port number of the destination port corresponding to the currently received data packet according to the self-stored routing table in the prior art and transmit the currently received data packet via the destination port indicated by the found port number of the destination port when every destination port in the network device runs well *(page 3, (0043-0044), see FIG. 2 shows is a block diagram showing a detailed composition of a transmission network 2, the transmission network 2 shown in this figure has nodes N1-9. These nodes N1-9 are connected, in a meshy pattern by links L1-12. The nodes N1-9 are cross-connecting apparatuses and/or routers etc. A path (route) for transmitting user signals is set on the transmission network 2. In FIG. 2, a path P1 passing the nodes N7/N8IN9 is set. Paths are classified into "currently-used*

paths table (self-stored routing table)" to be set and used when no failure is occurring to the paths).

Regarding **claim 9,** Skirmont discloses all aspects of the claimed invention, except *the first routing unit is further adapted to find out the corresponding port number of the destination port corresponding to the currently received data packet according to the self-stored routing table in the prior art and ~transmit to the second routing unit the found port number of the destination port when every destination port of the network device runs well*; *and the second routing unit is further adapted to search out the corresponding port number of the transmitting port to the port number of the destination port sent from the first routing unit in the currently saved relationship and transmit the data packet via the destination port indicated by the port number of the transmitting port searched out when each destination port of the network device runs well.*

Fujii is the same field of invention teaches the first routing unit is further adapted to find out the corresponding port number of the destination port corresponding to the currently received data packet according to the self-stored routing table in the prior art and ~transmit to the second routing unit the found port number of the destination port when every destination port of the network device runs well*(page 3, (0043-0044), see FIG. 2 shows is a block diagram showing a detailed composition of a transmission network 2, the transmission network 2 shown in this figure has nodes N1-9. These nodes N1-9 are connected, in a meshy pattern by links L1-12. The nodes N1-9 are cross-connecting apparatuses and/or routers etc. A path (route) for transmitting user*

signals is set on the transmission network 2. In FIG. 2, a path P1 passing the nodes N7/N8IN9 is set. Paths are classified into "currently-used paths table(self-stored routing table)" to be set and used when no failure is occurring to the paths); and the second routing unit is further adapted to search out the corresponding port number of the transmitting port to the port number of the destination port sent from the first routing unit in the currently saved relationship and transmit the data packet via the destination port indicated by the port number of the transmitting port searched out when each destination port of the network device runs well*(page 6, (0094), the received connection creation information is for the SNC6, the alternative route management tables having the SNC6 are two (2) such as the ones for the currently-used path P1 and P2, and the count value is two (2) since the currently-used path recovery flag is set to zero (0). Therefore, "two (2)" is set in the column for the number of the relevant paths for SNC6 in the overlapping connection information management table. On the other hand, when the received connection creation information is for the SNC5. the SNC5 is related to the currently-used path P1 and the currently-used recovery flag is set to zero (0) since the path P1 is registered in the alternative route management table. Therefore, the number of the relevant paths on the overlapping connection information management table is set to "one (1)")*.

Regarding **claim 10,** Skirmont discloses The network device according to Claim 7, wherein the first routing unit is adapted to transmit the found port number of the destination port to the second routing unit by carrying the number in the received data

packet*(column 1-2, the steps of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port))*; and the second routing unit is adapted to receive the port number of the destination port from the data packet sent from the first routing unit*(column 4-5, GFR(second routing unit) 67 stores a port-status table, shown in simplified form in FIG. 6, with a line item for at least each on the active card. such a table stored made to the port-status table)*.

Regarding **claim 17,** Skirmont discloses The network device according to Claim 8, wherein the first routing unit is adapted to transmit the found port number of the destination port to the second routing unit by carrying the number in the received data packet; and the second routing unit is adapted to receive the port number of the destination port from the data packet sent from the first routing unit(column 1-2, the steps of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port)); and the second routing unit is adapted to receive the port number of the destination port from the data packet sent from the first routing unit(column 4-5, GFR(second routing unit) 67 stores a port-status table, shown in simplified form in FIG. 6, with a line item for at least each on the active card. such a table stored made to the port-status table).

Regarding **claim 18,** Skirmont discloses The network device according to Claim 9, wherein the first routing unit is adapted to transmit the found port number of the destination port to the second routing unit by carrying the number in the received data

packet; and the second routing unit is adapted to receive the port number of the destination port from the data packet sent from the first routing unit(column 1-2, the steps of monitoring port status by a CPU on the line card, updating the information in the interface circuitry by the CPU listing port)); and the second routing unit is adapted to receive the port number of the destination port from the data packet sent from the first routing unit(column 4-5, GFR(second routing unit) 67 stores a port-status table, shown in simplified form in FIG. 6, with a line item for at least each on the active card. such a table stored made to the port-status table).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are:

- Skirmont et al. (WO 0223780, Mar. 21, 2002) teaches Router-Level Automatic Protection Switching

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IQBAL ZAIDI whose telephone number is (571)270-3897. The examiner can normally be reached on 7:30a.m to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NGO RICKY can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2416

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